

Supplementary Materials:

Table S1. List of sequenced specimens of *Pterostichus mandibularoides*, *Pterostichus brevicornis* and *Pterostichus nivalis*, including the location with BOLD and NCBI's GenBank accession numbers

Species	GenBank / BOLD IDS acc. no. (COI)	GenBank / BOLD IDS acc. no. (28S rRNA)	Locality	Data source*
<i>Pterostichus mandibularoides</i> Ball, 1966	MZ351271	MZ366469	Russia, Wrangel Island, Somnitelnaya Bay	Present study
<i>P. mandibularoides</i>	MZ351283	n/a	Russia, Wrangel Island, Somnitelnaya Bay	Present study
<i>P. mandibularoides</i>	MZ351286	n/a	Russia, Wrangel Island, Somnitelnaya Bay	Present study
<i>P. mandibularoides</i>	MZ351272	MZ366470	Russia, Wrangel Island, Somnitelnye Mountain	Present study
<i>P. mandibularoides</i>	MZ351273	MZ366471	Russia, Wrangel Island, Somnitelnye Mountain	Present study
<i>P. mandibularoides</i>	MZ351274	MZ366472	Russia, Wrangel Island, Somnitelnye Mountain	Present study
<i>P. mandibularoides</i>	MZ351284	n/a	Russia, Wrangel Island, Somnitelnye Mountain	Present study
<i>P. mandibularoides</i>	MZ351275	MZ366475	Russia, Chukotka, Alkatvaam	Present study
<i>P. mandibularoides</i>	MZ351276	MZ366476	Russia, Chukotka, Alkatvaam	Present study
<i>P. mandibularoides</i>	MZ351279	MZ366477	Russia, Chukotka, Meynipilgino	Present study
<i>P. mandibularoides</i>	MZ351280	MZ366478	Russia, Chukotka, Meynipilgino	Present study
<i>P. mandibularoides</i>	FCHAR1286-3	n/a	Canada, Nunavut	BOLD IDS
<i>P. mandibularoides</i>	FCHAR1288-3	n/a	Canada, Nunavut	BOLD IDS
<i>P. mandibularoides</i>	FCHAR1296-3	n/a	Canada, Nunavut	BOLD IDS
<i>P. mandibularoides</i>	FCHAR1299-3	n/a	Canada, Nunavut	BOLD IDS
<i>P. mandibularoides</i>	BETN7527-3	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. mandibularoides</i>	BETN4268-3	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. mandibularoides</i>	BETN7561-3	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. mandibularoides</i>	BETN7532-3	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. mandibularoides</i>	BETN7526-3	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. mandibularoides</i>	BETN4236-3	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. mandibularoides</i>	BETN4229-3	n/a	USA, Alaska, Toolik	BOLD IDS
<i>Pterostichus bevicornis</i> <i>brevicornis</i> Kirby, 1837	MN673460.1 ACHAR803-18	n/a	Canada, Nunavut	Pentinsaari, 2020
<i>P. b. brevicornis</i>	MN670020.1 ACHAR781-18	n/a	Canada, Nunavut	Pentinsaari, 2020
<i>P. b. brevicornis</i>	MN679965.1 ACHAR828-18	n/a	Canada, Nunavut	Pentinsaari, 2020
<i>P. b. brevicornis</i>	HQ961899.1 JSYKA240-10	n/a	Canada, Yukon, Firth River	GenBank BOLD IDS
<i>P. b. brevicornis</i>	HQ961900.1 JSYKA241-10	n/a	Canada, Yukon, Firth River	GenBank BOLD IDS
<i>P. b. brevicornis</i>	MN672408.1 ACHAR877-18	n/a	Canada, Nunavut	Pentinsaari, 2020
<i>P. b. brevicornis</i>	ACHAR876-18	n/a	Canada, Nunavut	BOLD IDS
<i>P. b. brevicornis</i>	MN670684.1	n/a	Canada, Nunavut	Pentinsaari, 2020

	ACHAR868-18			
<i>P. b. brevicornis</i>	FCHAR1280	n/a	Canada, Nunavut	GenBank
<i>P. b. brevicornis</i>	FCHAR2131	n/a	Canada, Nunavut	BOLD IDS
<i>P. b. brevicornis</i>	FCHAR6620	n/a	Canada, Nunavut	GenBank
<i>P. b. brevicornis</i>	FCHAR7057	n/a	Canada, Nunavut	BOLD IDS
<i>P. b. brevicornis</i>	FCHAR7369	n/a	Canada, Nunavut	GenBank
<i>P. b. brevicornis</i>	FCHAR7721	n/a	Canada, Nunavut	BOLD IDS
<i>P. b. brevicornis</i>	FCHAR1303	n/a	Canada, Nunavut	GenBank
<i>P. b. brevicornis</i>	FCHAR1618	n/a	Canada, Nunavut	BOLD IDS
<i>P. b. brevicornis</i>	FCHAR2132	n/a	Canada, Nunavut	GenBank
<i>P. b. brevicornis</i>	FCHAR5467	n/a	Canada, Nunavut	BOLD IDS
<i>P. b. brevicornis</i>	JSYKA235-10	n/a	Canada, Yukon, Firth River	GenBank BOLD IDS
<i>P. b. brevicornis</i>	HQ961895.1 JSYKA236-10	n/a	Canada, Yukon, Firth River	GenBank BOLD IDS
<i>P. b. brevicornis</i>	HQ961896.1 JSYKA237-10	n/a	Canada, Yukon, Firth River	GenBank BOLD IDS
<i>P. b. brevicornis</i>	HQ961897.1 JSYKA238-10	n/a	Canada, Yukon, Firth River	GenBank BOLD IDS
<i>P. b. brevicornis</i>	HQ961898.1 JSYKA239-10	n/a	Canada, Yukon, Firth River	GenBank BOLD IDS
<i>P. b. brevicornis</i>	KJ204113.1 HMCOC006-07	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KJ203181.1 HMCOC510-09	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KJ203639.1 HMCOC627-09	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KJ203239.1 MZCHU103-07	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KJ203875.1 MZCHU107-07	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KJ204094.1 MZCHU111-07	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	JN310764.1 TWCOL664-10	n/a	Canada, Manitoba, Churchill	GenBank BOLD IDS
<i>P. b. brevicornis</i>	KJ203437.1 DSCOL501-07	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KJ203343.1 HMCOC242-07	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KJ204090.1 HMCOC259-07	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KJ203213.1 HMCOC631-09	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KJ203822.1 HMCOC632-09	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KJ204238.1 HMCOC629-09	n/a	Canada, Manitoba, Churchill	GenBank BOLD IDS
<i>P. b. brevicornis</i>	HQ582357.1 TWCOL385-10	n/a	Canada, Manitoba	GenBank BOLD IDS
<i>P. b. brevicornis</i>	KJ203657.1 HMCOL237-09	n/a	Canada, Manitoba, Churchill	Woodcock, 2013
<i>P. b. brevicornis</i>	KU876036.1 UAMIC364-13	n/a	USA, Alaska, Talkeetna	Sikes, 2017
<i>P. b. brevicornis</i>	BETN4365-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4479-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4485-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4487-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS

<i>P. b. brevicornis</i>	BETN4497-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4506-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN647-18	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4477-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4488-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4361-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4480-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4483-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4484-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4500-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN646-18	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN7632-20	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4478-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4493-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4333-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4372-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4489-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4490-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4319-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4495-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4496-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4318-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4321-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4327-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4481-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN7631-20	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN7637-20	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN7640-20	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN7627-20	n/a	USA, Alaska, Southeast Fairbanks	BOLD IDS
<i>P. b. brevicornis</i>	BETN7619-20	n/a	USA, Alaska, Southeast Fairbanks	BOLD IDS
<i>P. b. brevicornis</i>	BETN4409-19	n/a	USA, Alaska, Denali	BOLD IDS

			Borough	
<i>P. b. brevicornis</i>	BETN4428-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4455-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4429-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4431-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4470-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN609-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4458-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN568-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN612-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4420-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN579-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN636-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4433-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN623-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN633-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4423-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. b. brevicornis</i>	BETN4254-19	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. b. brevicornis</i>	BETN4261-19	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. b. brevicornis</i>	BETN4256-19	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. b. brevicornis</i>	MT792007	MZ366473	Russia, Chukotka, Pevek	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792008	n/a	Russia, Chukotka, Pevek	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792009	MZ366474	Russia, Chukotka, Pevek	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792010	MT791964	Russia, Chukotka, Apapelnino	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792011	n/a	Russia, Chukotka, Apapelnino	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792012	n/a	Russia, Chukotka, Alkatvaam	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792013	n/a	Russia, Chukotka, Alkatvaam	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792014	n/a	Russia, Chukotka, Alkatvaam	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792015	n/a	Russia, Chukotka, Alkatvaam	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792016	n/a	Russia, Chukotka, Alkatvaam	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792017	MT791965	Russia, Chukotka, Hatyrka	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792018	MT791966	Russia, Chukotka, Hatyrka	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792019	n/a	Russia, Chukotka,	Zubrii, 2022

			Hatyrka	
<i>P. b. brevicornis</i>	MT792020	n/a	Russia, Chukotka, Hatyrka	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792021	MT791967	Russia, Chukotka, Amguema	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792022	MT791968	Russia, Chukotka, Amguema	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792023	MT791969	Russia, Chukotka, Meynipilgino	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351277	n/a	Russia, Chukotka, Kosa Belyaka	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351278	n/a	Russia, Chukotka, Kosa Belyaka	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792024	MT791970	Russia, Wrangel Island, Somnitelnaya Bay	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792025	MT791971	Russia, Wrangel Island, Somnitelnie mountain	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351285	n/a	Russia, Wrangel Island, Somnitelnie mountain	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351282	n/a	Russia, Wrangel Island, Somnitelnie mountain	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792026	MT791972	Russia, Wrangel Island, Mineeva mountain	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792027	n/a	Russia, Wrangel Island, Mineeva mountain	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792028	MT791973	Russia, Taimyr Peninsula, Kotuy	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792029	MT791974	Russia, Taimyr Peninsula, Kotuy	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792030	n/a	Russia, Taimyr Peninsula, Ary-Mas	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792031	MT791975	Russia, Taimyr Peninsula, Ary-Mas	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792032	n/a	Russia, Taimyr Peninsula, Ary-Mas	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792033	n/a	Russia, Taimyr Peninsula, Ary-Mas	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792034	n/a	Russia, Taimyr Peninsula, Ary-Mas	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792035	n/a	Russia, Taimyr Peninsula, Kotuy	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792036	n/a	Russia, Taimyr Peninsula, Kotuy	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792037	n/a	Russia, Taimyr Peninsula, Kotuy	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792038	MT791976	Russia, Polar Ural, Harp	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792039	MT791977	Russia, Polar Ural, Harp	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792040	MT791978	Russia, Polar Ural, Harp	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792041	MZ366462	Russia, Polar Ural, Harp	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792042	n/a	Russia, Polar Ural, Harp	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792043	n/a	Russia, Tazovsky	Zubrii, 2022

			Peninsula, Messoyaha	
<i>P. b. brevicornis</i>	MT792044	MT791979	Russia, Tazovsky Peninsula, Messoyaha	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792045	MT791980	Russia, Tazovsky Peninsula, Messoyaha	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792046	n/a	Russia, Tazovsky Peninsula, Messoyaha	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792047	MT791981	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792048	MT791982	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351267	n/a	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351259	n/a	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351260	MZ366463	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351261	MZ366464	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351262	n/a	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351263	n/a	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351264	n/a	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351265	n/a	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351266	n/a	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351267	n/a	Russia, Vaigach Island, Bolvansky Nos	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792049	MZ366465	Russia, Ygorsky Peninsula, Amderma	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792050	MZ366466	Russia, Ygorsky Peninsula, Amderma	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792051	n/a	Russia, Ygorsky Peninsula, Amderma	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792052	MT791983	Russia, Ygorsky Peninsula, Amderma	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351269	MZ366467	Russia, Ygorsky Peninsula, Amderma	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351270	MZ366468	Russia, Ygorsky Peninsula	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792053	n/a	Russia, Pinega reserve	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792054	MT791984	Russia, Pinega reserve	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792055	MT791985	Russia, Pinega reserve	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792056	MT791986	Russia, Kanin Peninsula, Shoina	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792057	MT791987	Russia, Kanin Peninsula, Shoina	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792058	n/a	Russia, Kanin Peninsula, Shoina	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792059	n/a	Russia, Kanin Peninsula, Shoina	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792060	n/a	Russia, Kanin Peninsula, Shoina	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792061	n/a	Russia, Kanin Peninsula, Shoina	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792062	n/a	Russia, Kanin Peninsula, Shoina	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792063	n/a	Russia, Kanin	Zubrii, 2022

			Peninsula, Shoina	
<i>P. b. brevicornis</i>	MT792064	n/a	Russia, Kanin Peninsula, Shoina	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792065	n/a	Russia, Yamal Peninsula, Seyakha	Zubrii, 2022
<i>P. b. brevicornis</i>	MT792066	n/a	Kamchatka, Karaginskiy Island	Zubrii, 2022
<i>P. b. brevicornis</i>	MZ351281	n/a	Kamchatka, Karaginskiy Island	Zubrii, 2022
<i>Pterostichus nivalis</i> R.F.Sahlberg, 1844	MT792067	MT791988	Russia, Chukotka, Apapeligino	Zubrii, 2022
<i>P. nivalis</i>	MT792068	MT791989	Russia, Chukotka, Hatyrka	Zubrii, 2022
<i>P. nivalis</i>	MT792069	MT791990	Russia, Chukotka, Kosa Belyaka	Zubrii, 2022
<i>P. nivalis</i>	ON366362	n/a	Russia, Chukotka, Apapeligino	Present study
<i>P. nivalis</i>	ON366363	n/a	Russia, Chukotka, Hatyrka	Present study
<i>P. nivalis</i>	ON366364	ON366372	Russia, Chukotka, Kosa Belyaka	Present study
<i>P. nivalis</i>	ON366365	n/a	Russia, Chukotka, Kosa Belyaka	Present study
<i>P. nivalis</i>	ON366366	n/a	Russia, Chukotka, Kosa Belyaka	Present study
<i>P. nivalis</i>	ON366367	n/a	Russia, Chukotka, Kosa Belyaka	Present study
<i>P. nivalis</i>	BETN4139-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4180-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4192-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4194-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4195-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4206-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4216-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4218-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4224-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4408-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4430-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4432-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4435-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4450-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4453-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4491-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS

<i>P. nivalis</i>	BETN570-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN573-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN576-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN7524-20	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN7540-20	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. nivalis</i>	BETN7557-20	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. nivalis</i>	UAMIC1886-14	n/a	USA, Alaska, St. Matthew Isl.	BOLD IDS
<i>P. nivalis</i>	UAMIC1888-14	n/a	USA, Alaska, St. Matthew Isl.	BOLD IDS
<i>P. nivalis</i>	BETN4136-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4137-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4138-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4144-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4146-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4147-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4170-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4171-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4176-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4178-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4193-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4200-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4203-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4205-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4208-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4436-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4449-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4460-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4473-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. nivalis</i>	BETN4492-19	n/a	USA, Alaska, Fairbanks Borough	BOLD IDS
<i>P. nivalis</i>	BETN575-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN7586-20	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4135-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4141-19	n/a	USA, Alaska,	BOLD IDS

			Utqiagvik	
<i>P. nivalis</i>	BETN4145-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4149-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4207-19	n/a	USA, Alaska, Utqiagvik	BOLD IDS
<i>P. nivalis</i>	BETN4226-19	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. nivalis</i>	BETN4260-19	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. nivalis</i>	BETN4407-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4448-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4451-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4452-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4454-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN4471-19	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN578-18	n/a	USA, Alaska, Denali Borough	BOLD IDS
<i>P. nivalis</i>	BETN7551-20	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. nivalis</i>	BETN7555-20	n/a	USA, Alaska, Toolik	BOLD IDS
<i>P. nivalis</i>	BETN7558-20	n/a	USA, Alaska, Toolik	BOLD IDS

n/a – not available



Figure S1. Paratypus of *P. mandibularoides* (female specimen) is deposited in the coleoptera collection of the Zoological Institute of the Russian Academy of Sciences (Saint Petersburg, Russia).

Table S2. The 28S rRNA gene polymorphism in three species of the *brevicornis* group

Nucleotide positions within a condensed alignment	<i>Pterostichus mandibularoides</i>	<i>Pterostichus b. brevicornis</i>	<i>Pterostichus nivalis</i>
68, 172, 177, 289, 432, 448	C	T	T

87	T	C	A
93	A	A	T
96, 400	T	T	A
98	A	A	G
102, 401	T	A	T
123	G	A/T	A
149	G	A	G
168	T	C	C
231	A	A/T	G
232	A	C	T
233	T	A	A
259, 399	C	T	C
267, 272	C	A/C	A
288, 351, 363	A	G	G
397	T	T	G
425, 429	C	T/C	T
428	G	G	A

Letters are FASTA codes for nucleotides but with additional polymorphisms shown explicitly.